

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Bent River Machine Inc.

Arizona Manufacturing Extension Partnership

Bent River Machine Adopts Lean Tools to Improve Product Delivery

Client Profile:

Bent River Machine, founded in 1978, has evolved from a machine shop into a complete solution for any custom tooling or automation application. Located in Clarkdale, Arizona, Bent River manufactures their own line of Solar Photovoltaic Laminators, JEDEC Tray and Auer Boat handlers, conveyers and other products. The company employs 25 people.

Situation:

Bent River was concerned because it needed an updated process for incoming order management and inventory control. The company contacted the Arizona Manufacturing Extension Partnership (Arizona MEP), a NIST MEP network affiliate, for help.

Solution:

Arizona MEP helped Bent River implement a Kaizen project on the purchase order processing cycle. Through the Kaizen, the existing process was analyzed, and an improved process designed. In the new process, a bell rings when an order arrives at Bent River. Every department (engineering, purchasing, machining, and assembly) has one hour to go on-line, review their specific piece of the order, and determine if there are any problems that might hinder an on time delivery. At one hour, the team meets to review any concerns or roadblocks, take action items, and set the schedule. If a delivery might be delayed for a part shortage, the situation is immediately communicated to the customer. The improvements in this area led to an additional Value Stream Mapping (VSM) of the inventory process.

The inventory storage was unsustainable. The computer inventory quantities were inaccurate 80 percent of the time making the information useless. With Arizona MEP's assistance, the inventory area is newly painted and completely reorganized with custom racks for wire and custom wall hangers for pneumatic tubing. Every item has a bin location, and the company is cycle counting inventory with about an 89 percent accuracy. They now have visual scheduling on all the boxes for a job, which are all color coded and stored on carts. The color coding makes it easy to tell where a job is on the floor and what jobs go together. Prior to working with Arizona MEP, it was taking as much as 2 to 3 weeks to process the paperwork to get the job to the floor. This was causing long lead times and late deliveries. But the company's recent metrics indicate that 88 percent of the new jobs received in the month were on the floor within 72 hours of the purchase order meeting. Additionally, after a VSM of the inventory process, inventory accuracy has improved from about 20 percent to 89 percent accuracy.

Results:

* Reduced lead time from 2-3 weeks to 72 hours.

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

* Improved inventory accuracy by 69 percent.

Testimonial:

"Arizona MEP was generous with their time and willing to do whatever it took to make sure that all of us at Bent River Machine achieved results with the Kaizens they facilitated. The Kaizens that Jim Godfrey of Arizona MEP facilitated have improved the very fabric of our business. The other result of Arizona MEP's foundational approach of training the trainer has resulted in monthly Kaizens that are the framework for our preventative actions in our quality system that we conduct internally at Bent River. The positive impact of the work that we did with the Arizona MEP ripples through our business daily."

Norela Harrington, President/Owner